

REPLACEMENT SHEET



Fig. 3

	Band 1		Band 2	
	down	up	down	up
Freq. Band (f_c), MHz	280	280	850	850
Trans. Rate(R), kbps	4.8	1.2	4.8	1.2
Tx Power (P_{Tx}), watt	40	0.1	40	0.1
Tx ant. Gain (G_T), dBi	7	-5	7	-5
Tx ant.height(h_t/h_m) m	30	1	30	1
Prop. dist.(r), km	9.85	2.03	4.08	0.86
RxBS/TxBS raito	23		23	
Prop. Loss (L_P), dBm	148.5	124.8	148.6	124.7
Rx ant. Gain (G_R), dBi	-5	2	-5	2
Rx ant.height(h_m/h_b) m	1	30	1	30
Rx power (P_{Rx}), dBm	-100.5	-107.8	-100.6	107.7
Receiver NF, dB	5	4	5	4
Noise Eq. temp. $^{\circ}\text{K}$	777	588	777	588
Noise PSD (N_0), dBm/Hz	-169.7	-170.9	-169.7	-170.9
Receive C/N_0 , dB	69.2	63.1	69.1	69.2
Receive E_b/N_0 (γ), dB	32.4	32.3	32.3	32.4
Reqd E_b/N_0 (γ_{req}), dB	12.3	12.3	12.3	12.3
SNR margin, dB \approx	20	20	20	20

Fig. 4

Locality	Band 1		Band 2	
	down	up	down	up
Urban, small-medium	9.48	2	4.08	0.86
Urban, large	9.85	2.03	4.08	0.86
Suburban	14.44	3.05	6.33	1.33